

N^o 4087



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COMPLETE SPECIFICATION.

“Apparatus for use in Breeding Cattle or Domesticated Animals”

I, FRANZ HÜTTENRAUCH of 27—29 Utenbacherstrasse, Apolda, in the Grand Duchy of Saxe-Weimar, German Empire, Manufacturer, do hereby declare the nature of this invention and in what manner the same is to be performed to be particularly described and ascertained in and by the following statement:—

5 The present invention relates to apparatus for facilitating copulation between cattle or domesticated animals, more particularly in the case of heavy male animals and slender or weak females.

Substantially the apparatus consists of an adjustable frame or casing for the reception of the female animal, which casing is capable of being closed or partly
10 closed at its rear end, this rear end also being capable of being raised and lowered at will, whilst the front end of the casing is capable of being closed and either extended or shortened by means of inserted bars forming the front walls or barriers. Means are also provided to prevent the female from laying down by supporting it with an adjustable belly-band situated immediately in front of the
15 hind legs. At the same time the back of the female is covered or partly covered or protected with a vertically adjustable padded saddle-like support for the male animal, so that injury to the female by the weight of the male during the act is precluded. By this means the female is relieved of the weight of the male and at the same time, by suitably raising or lowering the rear end of the
20 apparatus in accordance with the difference in the height of the two animals, their generative organs can be brought into juxtaposition in the requisite manner.

In the accompanying drawings an example of the improved apparatus is illustrated.

25 Fig. 1 being a right-hand side elevation of the apparatus, showing it in the position, when the female animal introduced therein is prevented from altering its position within the casing 1.

Fig. 2 being a left-hand side elevation of the apparatus, its rear end being in the raised position.

30 Fig. 3 is a longitudinal section.

Fig. 4. is a vertical section on line A—B.

Fig. 5. is a vertical section on line C—D

Fig. 6 is a vertical section on line E—F.—all these being sections of Fig. 1.

Fig. 7. is a rear view of the apparatus when closed.

35 The casing 1 of suitable length and width is terminated at its front by lattice-like barriers 4, capable of being lifted in the vertical direction by their handles 2; these walls 4 being guided in vertical recesses 3 of the longitudinal walls of the casing 1 arranged at certain distances from one another. The walls or barriers 4, of which two are provided, serve for adjusting, in accordance with
40 the size of the female animal, the casing 1 to the required length and for preventing this animal from getting away through the front.

It is true, that practically one of such walls 4. would be sufficient for the said purpose, but a mistake in judging the length of an animal may easily occur and in this case it would be necessary to remove the wall 4 and place it into
45 another guiding recess; and if the animal is disposed to leave the apparatus it could in such case easily escape. By this escape the animal would be disturbed

[*Prize 8d.*]

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without any necessity and possibly frightened so far that the act may not be feasible at all. In order to obviate this drawback, a second barrier 4 is provided, which is always inserted in front of the wall situated immediately in front of the animal so that in case this latter barrier is removed, the second barrier prevents the animal from escaping.

The front part of the longitudinal walls of the casing 1 and also the barriers 4 are constructed at such height that the animal cannot jump over them.

The barriers 4 are made like lattices, in order that the animal when being driven into the casing 1 still retains a free view, which fact will render it much easier to get the animal into the apparatus.

The rear wall of the casing 1 consists of a flap door 7 capable of turning upon its axis 5 and of being locked at 5 and 6; this door serves, when turned down, as gangway for the animal to be driven into the apparatus.

The belly band 8 (shown in full lines in Fig. 5 and in dotted lines in Fig. 1.) supporting the female animal immediately in front of the hind legs is entirely lowered when the animal is about to be driven in. The said band is secured to the longitudinal wall of the casing near 9 and attached to the opposite wall at 10 by means of a buckle or the like, this being rendered capable of adjustment in accordance with the height of the female animal.

The padded saddle like support 11 to protect the female animal during the act entirely relieves it of all weight of the male and is provided for the male animal, and vertically guided by means of hoop-shaped bars 12 along the casing 1.

These guiding bars 12 loosely rest each with its horizontal part upon the free top-end of a lever 14; these levers 14 are mounted upon a common easily turnable cross-shaft 15 which has its bearings at the bottom of the casing 1.

The said cross-shaft 15 is rendered capable of being rotated by means of a hand lever 16 which is constructed of one and the same piece as the right-hand-side lever 14; thus the support 11 may be adjusted in its height according to requirement.

The hand-lever 16 is secured in the desired position by means of studs 17 provided in a bent piece 18 which is secured to the main frame or casing.

The lever 14 is connected to the guiding bars 12 by means of the lugs or extensions 19 projecting towards the bottom, in the longitudinal slits 20 of which lugs, the bolt 21 of the lever 14 engages. The same purpose may equally well be attained by providing the free ends of the levers 14 with rollers movably engaging in longitudinal recesses at the bottom of the guiding bars 12. The latter may also be simply provided with widenings at the places where the levers 14 are caused to engage them.

For adjusting the rear end of the apparatus in accordance with the difference in the height of the two animals supporting arms 22 are provided which are firmly mounted upon a common shaft or axis 23, the latter being capable of easily turning in bearings situated near the rear bottom edge of the casing 1. Upon the free end (at the left hand side) of this axis 23, a hand lever 25 is mounted which can be regulated as regards its height according to requirement by means of a pin 26 and a chain 27, the latter being attached to the casing 1. The rear-end of this casing is therefore brought into a higher or lower position, when the supporting arms 22 assume a more vertical or a more oblique position and it may be secured at the right place in accordance with the requirements.

When the apparatus is to be made use of, the door 7 is first opened by lowering it into the position shewn by dotted lines in Fig: 1; thereupon the barriers 4 are introduced into the guiding recesses at suitable places dependent on the length of the female animal.

After the saddle like support 11 has been adjusted at a height corresponding to that of the female animal, the latter is driven into the casing 1 and its door 7 (shewn in Fig: 1 in full lines) is closed. Directly after this the buckle is

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loosened at 10 and the belly band 8 is fixed across beneath the animal's belly in such a manner that the female animal is prevented from lying down (see Fig: 5).

In case the barrier 4 immediately near the animal should be inconvenient to the latter and prevent it from freely moving its head, this barrier 4 must be removed, so that the second barrier 4 may now be reached by the animal. Now the support 11 is lowered so far, that only a short distance is left between it and the back of the female animal, (see Figs: 1 and 5) whereupon the male animal may be led to the apparatus. If the operator notices that the female animal is not placed at the convenient height, considering that of the male animal the rear end of the apparatus must be raised or lowered by means of lever 25 so far, that the generative organs are brought into juxtaposition in the requisite manner. The lever 25 is then secured in the required position as has been hereinbefore described (see Fig. 2.)

After the act is consummated, the support 11 may be raised again, the belly band 8 may be loosened and lowered (this position is shown by dotted lines in Fig: 5), and the barriers 4 are pulled out towards the top by their handles 2, so that the female animal may be allowed to leave the apparatus at its front.

In case the apparatus is again to be employed, it must first be lowered at its rear end; the door 7 is then turned down and the whole operation begins anew (see Fig 1).

The improved apparatus may be constructed from any suitable material, as iron, wood or otherwise; but iron and wood may be used for its construction in combination with one another and the apparatus may be of any suitable size and dimensions, fit for any kind of cattle or animals for which it is applicable.

Having now particularly described and ascertained the nature of my said invention and in what manner the same is to be performed I declare that what I claim is:—

1. An apparatus for facilitating the copulation of cattle or other animals and for relieving the female animal from weight in the case of heavy male animals and slender or weak females, consisting of a casing (for the reception of the female) capable of being closed at its rear end, and of being raised and lowered at will, whilst the front end of the casing is rendered capable of being extended or shortened by introducing removable barriers 4, means to prevent the female animal from lying down by supporting it with an adjustable belly band situated immediately in front of the hind legs, adjustable means to protect the back of the female by providing a vertically adjustable, padded and saddle-like support 11 for the male animal, so that injury to the female by the weight of the male during the act is precluded, and so that by suitably lowering or raising the rear-end of the apparatus in accordance with the difference in height of the two animals, their generative organs can be brought into juxtaposition in the requisite manner, substantially as hereinbefore set forth.

2. Apparatus, for use in breeding cattle or other domesticated animals, constructed combined and arranged to act substantially as and for the purposes hereinbefore described with reference to the drawings hereunto annexed.

Dated this 17th day of February. 1902

E. GAUDER
Agent for the Applicant



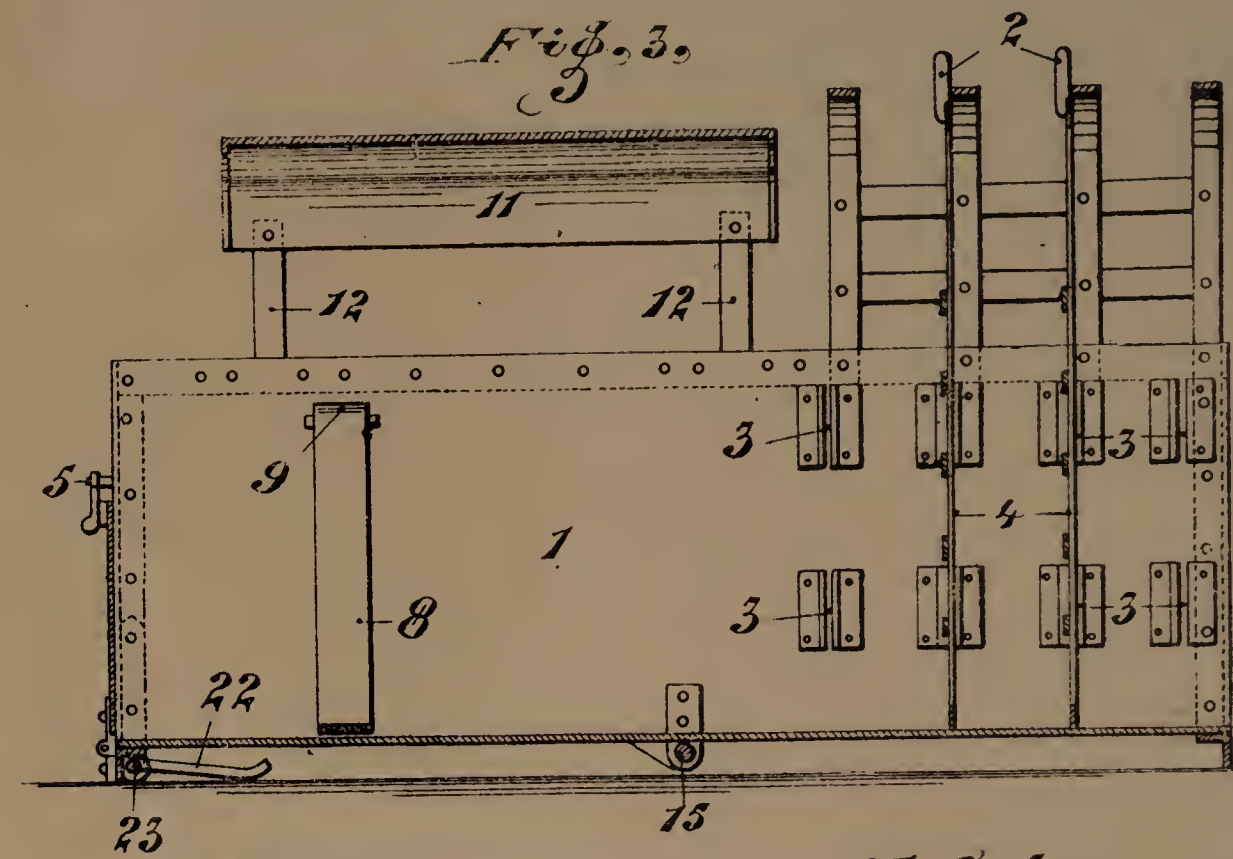
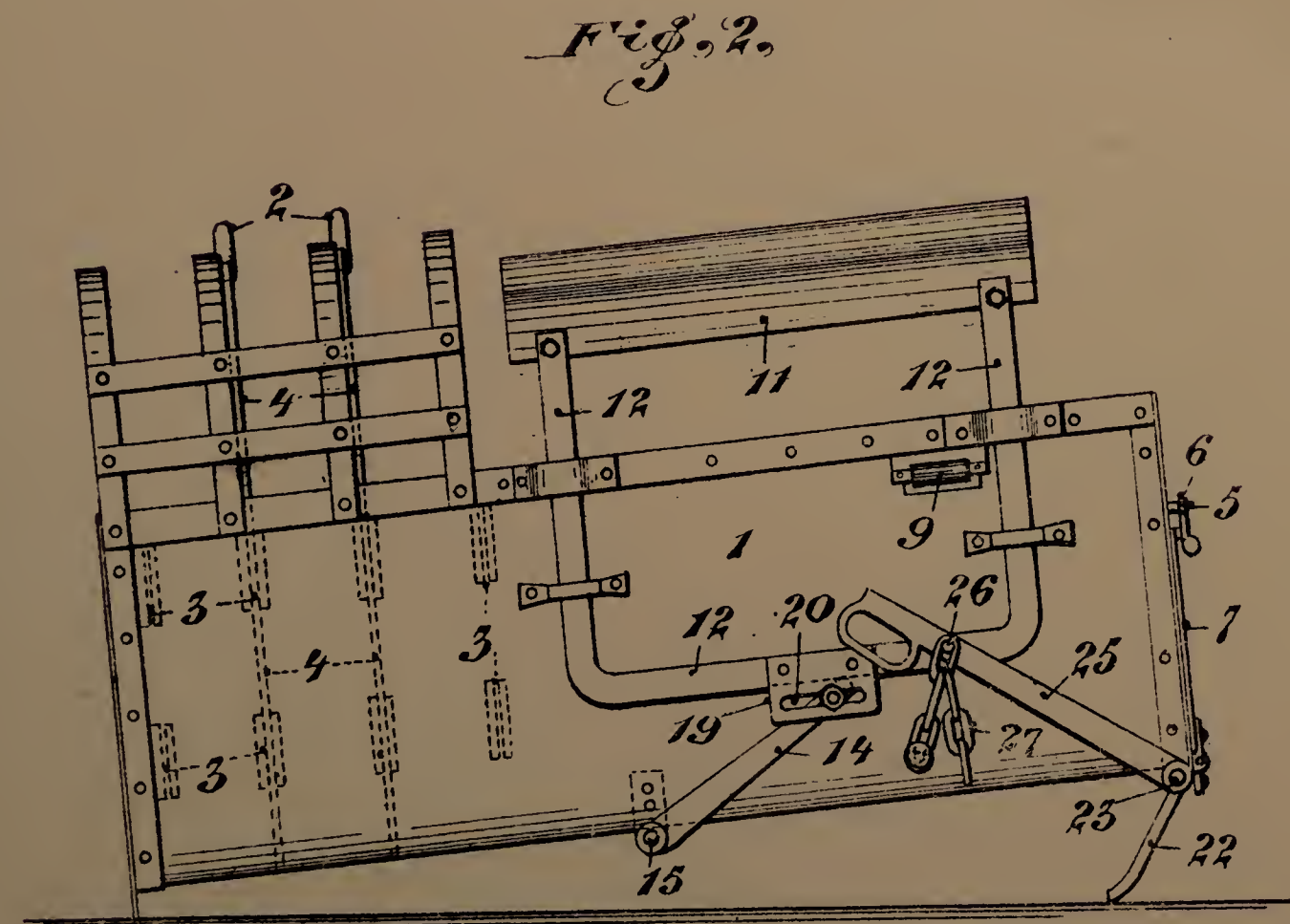
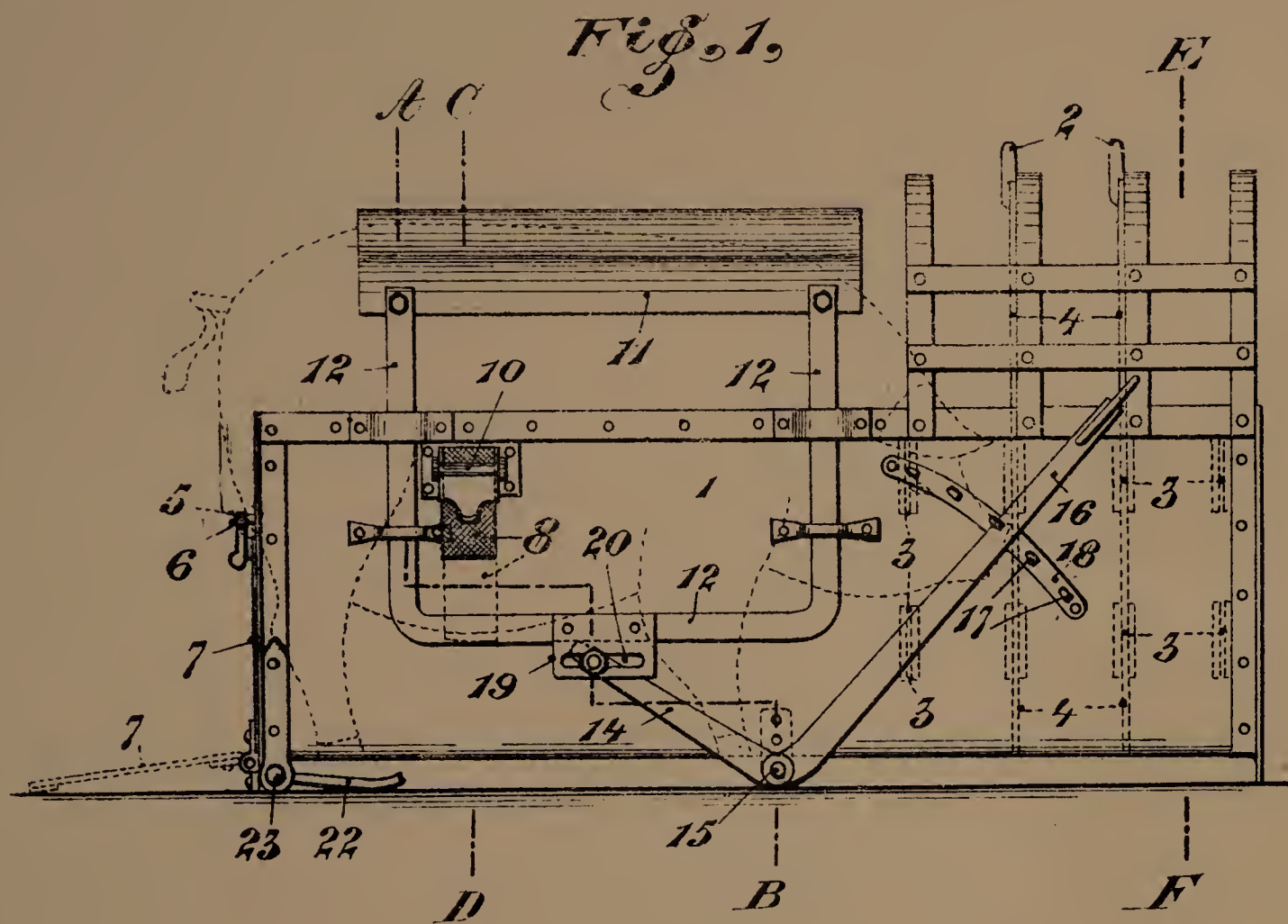


Fig. 4,

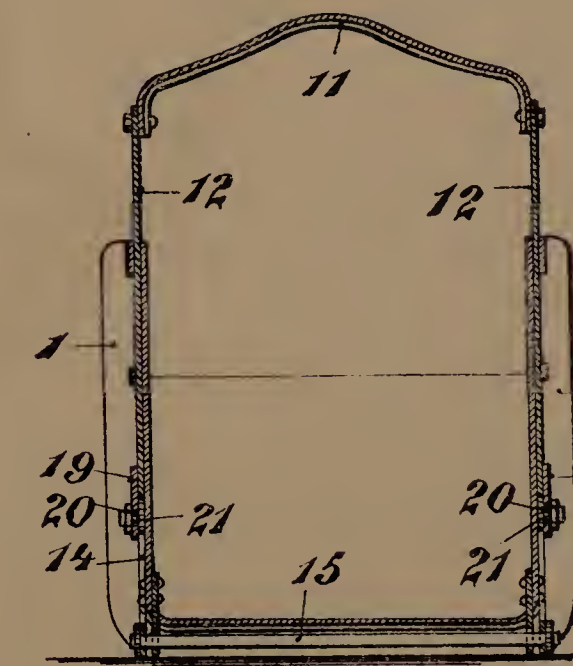


Fig. 5,

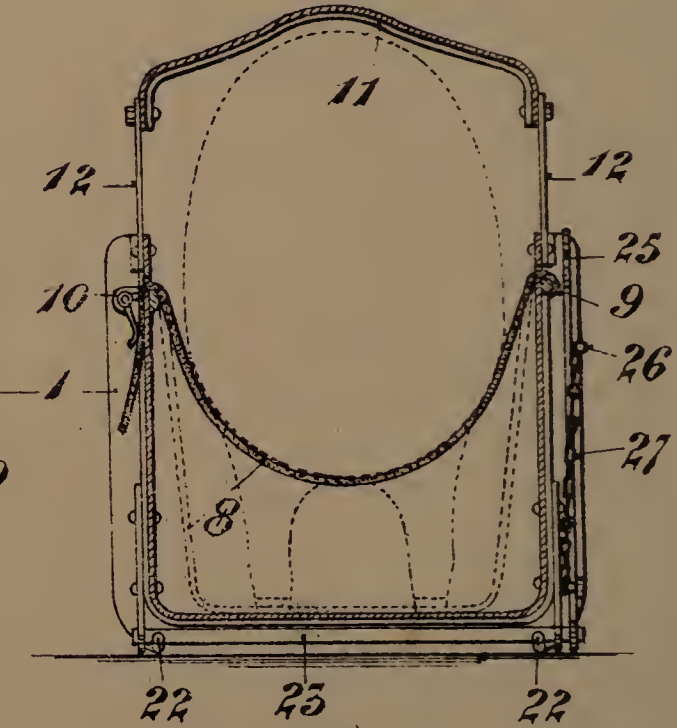


Fig. 6,

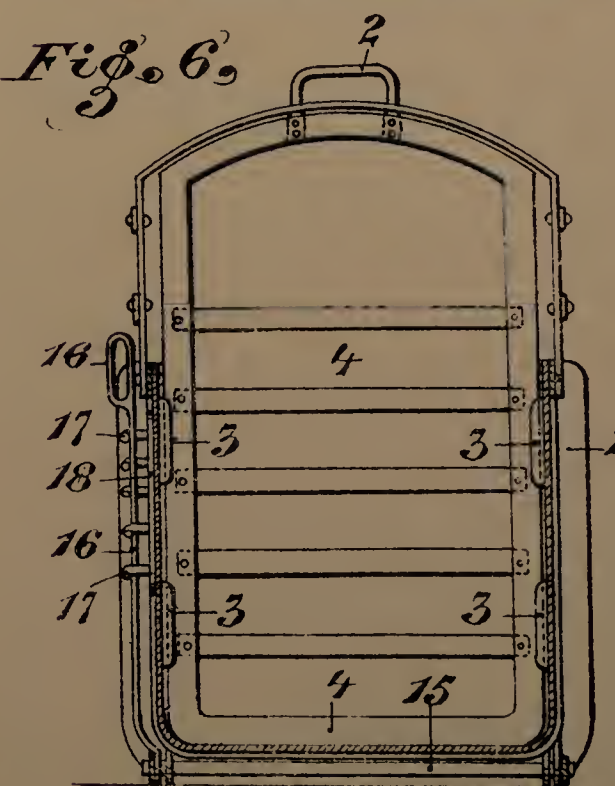
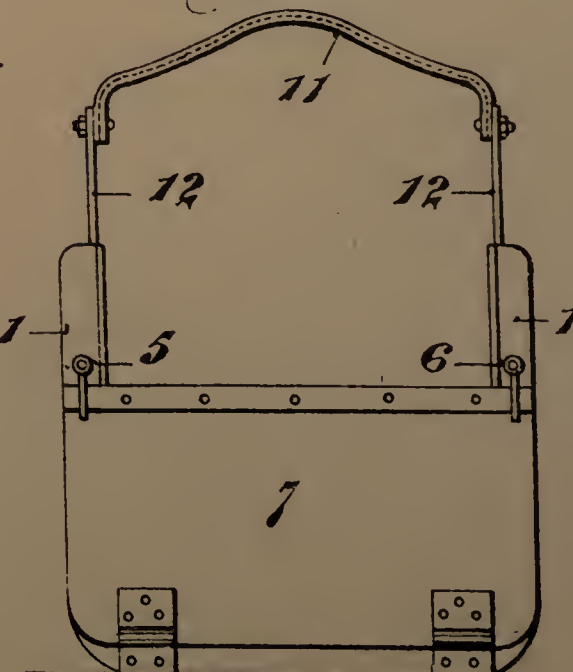


Fig. 7,



[This Drawing is a reproduction of the Original on a reduced scale.]

